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ADDITIONAL FACTS AND VIEWS

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SOVIET METEOR RESEARCH

1. Soviet work in meteor research has been extensive and merits respect. During the IGY alone, the USSR carried out observations at 8 stations: Tomsk, Kazan', Kiyev, Khar'kov, Odessa, Simferopol', Dushanbe, and Ashkhabad. Some of the leading scientists in this work were: V. V. Fedynskiy, V. P. Tsesevich, I. S. Astapovich, P. B. Babadzhanov, I. T. Zotkin, B. L. Kashchayev, K. V. Kostylev, Ye. N. Kramer, B. Yu. Levin, and Ye. I. Fialko. The investigations included: the reflection of radio signals from meteor trails, observation of Fresnel zones as a means of determining meteor velocities, the structure of meteor streams, observations of meteor showers, resonance effects during the scattering of radio waves by meteor trails, the application of radio-echo techniques, and other related studies. Visual, photographic and radar methods were employed in these studies.

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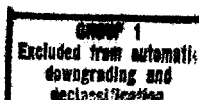
2. It is apparent from the content of the articles that Soviet meteor research is proceeding along similar lines as US efforts. There seems to be relatively less Soviet effort directed toward determining air densities at high altitudes from meteor decelerations than in the US, probably because the atmospheric model is being studied more advantageously from changes which occur in satellite orbits. On the other hand, there seems to be a greater Soviet concentration of effort upon the application of radar techniques to meteor research. In the past both the US and the USSR have employed specially designed camera groupings for the optical tracking of meteors. The US probably excels currently in the exacting instrumentation essential for meteor research, particularly in the design and construction of tracking cameras and, very recently, in auxiliary automation apparatus for both radar and optical tracking.

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25 YEAR RE-REVIEW

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